

What is claimed is:

1. A switching power supply device comprising:

a rectifier for rectifying the AC input;

a line filter consisting of a first coil which is

5 connected in series to a high voltage side output of the rectified output of the rectifier and a second coil which is connected in series to a low voltage side output of the rectified output of the rectifier;

a transformer of which a primary winding is connected

10 to an output of the line filter; and

a switching element for energizing and de-energizing the primary winding of the transformer, the switching power supply device being filled with resin to cover the entire circuit module,

15 wherein the switching power supply device further comprises at least one diode which is connected in a forward direction from an input of the second coil to an output of the first coil and/or at least one diode which is connected in a forward direction from an output of the 20 second coil to an input of the first coil.

2. A switching power supply device according to claim 1, further comprising a condenser which is connected in parallel to the first coil and/or the second coil.

3. A switching power supply device comprising:

25 a rectifier for rectifying the AC input;

a line filter consisting of a first coil which is connected in series to a high voltage side output of the

rectified output of the rectifier and a second coil which is connected in series to a low voltage side output of the rectified output of the rectifier;

5 a transformer of which a primary winding is connected to an output of the line filter; and

a switching element for energizing and de-energizing the primary winding of the transformer, the switching power supply device being filled with resin to cover the entire circuit module,

10 wherein the switching power supply device further comprises at least one condenser which is connected between an output of the first coil and an input of the second coil and/or at least one condenser which is connected between an input of the first coil and an output of the second coil.

15 4. A switching power supply device according to claim 2, further comprising a condenser which is connected in parallel to the first coil and/or the second coil.

5. A switching power supply device comprising:

a rectifier for rectifying the AC input;

20 a line filter consisting of a first coil which is connected in series to a high voltage side output of the rectified output of the rectifier and a second coil which is connected in series to a low voltage side output of the rectified output of the rectifier;

25 a transformer of which a primary winding is connected to an output of the line filter; and

a switching element for energizing and de-energizing

the primary winding of the transformer, the switching power supply device being filled with resin to cover the entire circuit module,

wherein the switching power supply device further  
5 comprises a condenser which is connected in parallel to the first coil and/or the second coil.